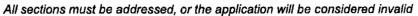


### **FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION**





### I. APPLICANT INFORMATION

Α.	Applicant Name: Mat	McCleary		· way · · · · · · · · · · · · · · · · · · ·	WOODMED-100		
	Mailing Address: 226	02 New Court Place	e Street				disdonante com solvente com solvente se se com solvente se se com solvente com solv
	City: Tomball		_ State:	TX	Zip:	77375	
	Telephone: <u>406-208-0-</u>	<u>466</u>	E-mail:	Mmcclea	y99@	gmail.com	00000000000000000000000000000000000000
В.	Contact Person (if different applicant):	ent than	Mike R	uggles			
	Address: 2300 Lake E	Imo Drive		-4-2		- Produce shall be a second	
	City: Billings		State:	МТ	Zip:	59105	
	Telephone: <u>46-247-29</u>	<u>61</u>	E-mail:	mikerugg	les@ı	mt.gov	
C.	Landowner and/or Lesse Name (if different than applicar Mailing Address:	-4\-					
		The state of the s					
	Telephone:		E-mail:	2000000 Co.			
PR	OJECT INFORMATION Project	nry Channel Restora	ation	,			
	River, stream, or lake:	Musselshell River					
	Location: Township:		Range:	30E : -107.9141	<b>.</b>	-	2 (decimal degrees)
	Latitude:  County: Musselshell	46.57237	Longitude	. <u>-107.9141</u>	COSHOCKACO MINARETO MACA	wiaini project (	uocimai degrees)
₿.	Purpose of Project:						

II.

Restore connection to 1.5 miles of river channel, provide more habitat for fish, maintain pump site and point of withdrawal for irrigation water, and water supply to two farms.

C. Brief Project Description (attach additional information to end of application):

This channel was lost to an avulsion in 2018. I would like to restore full connectivity to improve river dynamics by reducing the steeper slope created as a result of cutting off the channel. This channel will provide 1.5 miles of aquatic habitat. The loss of water to this channel resulted in a limited ability to access water for irrigation and water supply for two homes. The plan is to plug the avulsion with a rock, gravel, and dirt filled bank that will be mechanically placed. A slope of 3 to 1 will be created on the back side to reduce the opportunity of a large flood to undercut the built bank. The downstream area in the avulsion channel will be left as a pool and is anticipated to become a wetland backwater complex. Through time and with successive floods this area should accumulate soils and vegetation. This process will increase stability and resiliency.

Mike Ruggles with Montana Fish Wildlife and Parks with Paul Sanford from Allied Engineering developed alternatives that included filling most of the avulsion channel and another with rebuilding the bank but not filling the avulsion channel. The cost of filling the avulsion channel with a bank slope of 10:1 exceeds available funds. It would potentially be a less deformable approach than the plan to build a riverbank with less fill. The alternative to build the bank with a 3 to 1 slope and let the river rebuild the interior bench is the most economical alternative. The bank will be designed to allow overtopping water and hold however the bank will be higher than the 2011 flood and not anticipated to regularly overtop.

The original plan and budget for full bank and fill is attached to show the cost of the large plan and for comparison to the current plan of building the bank.

D. Length of stream or size of lake that will be treated:

 1.5 miles restored, 800 feet of rock and soil bank created.

E. Project Budget:

Grant Request (Dollars): \$ 80,000

Matching Dollars: \$ 119,827

Matching In-Kind Services:\* \$

\*salaries of government employees are not considered matching contributions

Total Project Cost: \$ 199,827

- F. Attach itemized (line item) budget see budget template
- Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support and fish biologist support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete a supplemental questionnaire. (http://wp.mt.gov/fwpDoc.html?id=36110)
- H. Attach land management & maintenance plans that will ensure protection of the reclaimed area.

- III. PROJECT BENEFITS (attach additional information to end of application):
  - A. What species of fish will benefit from this project?

Sauger, catfish, white sucker, longnose sucker, river carpsucker, black crappie, carp, freshwater drum, emerald shiner, flathead chub, fathead minnow, green sunfish, goldeye, ling, lake chub, longnose dace, mountain sucker, plains minnow, stonecat, sand shiner, shorthead redhorse, smallmouth bass, smallmouth buffalo, walleye, western silvery minnow. Other species spiny softshell turtle, painted turtle, blue heron (nesting colony a few miles upstream). Many other aquatic invertebrates including fatmucket mussels.

B. How will the project protect or enhance wild fish habitat?

This project will restore 1.5 miles of river habitat lost to an avulsion in 2018. The channel restored has several pool riffle complexes as well as other complex habitats to support fisheries. This channel if not restored will become an established wetland complex with only periodic access to fish. This past December, while walking in the abandoned channel I found several large catfish skulls and other fish remains indicating this reach was used by large game fish which likely supported abundant forage fish populations.

C. Will the project improve fish populations and/or fishing? To what extent?

It will increase the total available habitat for fish including spawning, rearing, and adult habitat. Hundreds to thousands of total fish can be found per mile of river in many systems. While total fish per mile information isn't available electrofishing efforts downstream and above show this area can and does support a diverse fishery. The Musselshell lost almost 37 miles of channel after 2011's flood and many miles more after 2018. The avulsions do create new channels typically much shorter than what was lost. After 2011 avulsions created 9 miles of new channel. After 2011 8% of the river was lost from Fort Peck to Harlowton with the most severe loss occurring below Roundup, particularly below Flatwillow Creek. This project will restore a fraction of the total loss but will restore 1.5 miles of channel. There are other potential restoration sites that will be informed from the actions taken at this site.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?

I allow public fishing with permission and there is access from the Harvey road bridge just downstream for people that want to use the stream access law to enter the river. Additionally, this habitat will help increase the total number of fish in the river as it provides habitat not currently available for populations.

E. The project agreement includes a 20-year maintenance commitment. Please discuss your ability to meet this commitment.

This channel when active provides delivery of water to my legal point of withdrawal for the irrigation system and is the source of water for two farm homes and livestock water. I plan to take all reasonable actions to protect this point of withdrawal for farm management as well as the health of the river.

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?

The Musselshell River has been encroached upon by the now abandoned railroad, then again by the state highway system, and again by a popular agricultural practice to straighten rivers in the mid 1900's. Many miles of river have been cut off by these actions significantly reducing length. Recent floods have caused significant changes by cutting off other channels. This channel was cutoff in the 2018 flood with the potential increasing since the 2011 flood. The river has become steeper and faster. By creating a rock bank with willow and vegetated coverings that leads back to the natural banks this will be one larger project to re-establish as much length as possible on my ranch to benefit aquatic resources and re-establish the river connection to my water source. The plan to fill in the avulsion channel was too costly. This plan will reduce the cost and leave a large backwater habitat area. This area is anticipated to mature with siltation through time and ultimately create a stable environment.

G What public benefits will be realized from this project?

The aquatic resources will have access to a larger area of now lost habitat. The cost to create a new 1.5-mile channel would be prohibitive, in most circumstances. Completing this project as a public/private cost share I reduce the need to find and use other public funds. This allows other funds to be used for other projects. There is an existing channel that was functioning until the cutoff of 2018. The sauger a species of concern in this area requires long distances of river to persist. While I cannot provide more miles of habitat, I hope to encourage others through my actions to take steps to increase the length of the river when possible. Holistically, slowing down the water by reducing channel slopes here and with other potential projects ground water levels should increase which improves summer return flows also providing for improved habitat throughout the basin. This project fits well with the Musselshell Water Coalition's working groups resiliency planning for the river.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No. It will allow me to use my water right at the point of withdrawal. The cost to move the pump site, place new waterlines, and move the power supply has been estimated to cost about 60,000 dollars. There will be a change to the rate of delivery of contract water for a short time period. Delivery rates have changed dramatically over time as a result of this and many other channel changes. The use of USGS gauges and experience of the Musselshell Basin Irrigation projects will help re-adjust to the added length of the river.

Will the project result in the development of commercial recreational use on the site? (explain):

No. I don't have a commercial recreational plan for this area. It is agricultural land and pasture.

J. Is this project associated with the reclamation of past mining activity?

	No
ac	h approved project applicant must enter into a written agreement with Montana Fish, Wildlife &
ar	ks specifying terms and duration of the project. The applicant must obtain all applicable permits or to project construction. A competitive bid process must be followed when using State funds.
ar	ks specifying terms and duration of the project. The applicant must obtain all applicable permits
ic	ks specifying terms and duration of the project. The applicant must obtain all applicable permits or to project construction. A competitive bid process must be followed when using State funds.  AUTHORIZING STATEMENT  I (we) hereby declare that the information and all statements to this application are true, complete, an accurate to the best of my (our) knowledge and that the project or activity complies with rules of the

Submittal: Applications must be signed and received before December 1 and June 1 of each year to be considered for the subsequent funding period. Late or incomplete applications will be rejected.

Mail to:	Montana FWP	Email:	Michelle McGree
	Fish Management Bureau		mmcgree@mt.gov
	PO Box 200701		(electronic submissions must be signed)
	Helena, MT 59620-0701		For files over 10MB, use https://transfer.mt.gov

Applications may be rejected if this form is modified.

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

Both tables must be completed or the application will be returned

					8	CONTRIBUTIONS	S	
UNIT DESCRIPTION*	COST/UNIT	TOTAL	COST	FUTURE FISHERIES REQUEST	IN-KIND SERVICES**		IN-KIND CASH	TOTAL
							4,928.00 \$	4,928.00
		69	į				100	3,000.00
		8	,				69	
		69	•				69	
		69	4				69	•
.,	Sub-Total	8	Ġ	S	49	69	7,928.00 \$	7,928.00
		69					69	
		69	3				s	
3,	Sub-Total	€9	i	\$	8	69	<i>\$</i>	-
	\$5.00	8	16,850.00		16,8	16,850.00	69	16,850.00
	\$5.00	8	16,850.00	12,900.00	3,9	3,950.00	69	16,850.00
	\$100.00	5	20,700.00	20,700.00			49	20,700.00
	\$100.00	69	46,400.00	46,400.00			8	46,400.00
	\$2,420.00	69	4,840.00		4,8	4,840.00	8	4,840.00
1000 Square Yards	\$1.50	69	1,500.00		1,5	1,500.00	69	1,500.00
	\$100.00	69	35,500.00		35,5	35,500.00	ь	35,500.00
		69					\$	
		S	7				69	
44	Sub-Total	=	42,640.00	\$ 80,000.00	49	62,640.00 \$	9	142,640.00
	\$3,000.00	S	15,000.00		15,0	15,000.00	€9-	15,000.00
	-	63	5,500.00		5,5	5,500.00	69	5,500.00
	\$1.00	S	2,937.00		2,9	37.00	₩.	2,937.00
		69	1				49	1
		S	1				69	
		69	•				4	
5,	Sub-Total	69	23,437.00	\$	\$ 23,4	23,437.00 \$		23,437.00
			20,000.00		20,0	20,000.00	69	20,000.00
	-		10,000.00		10,0	10,000.00	65	10,000.00
	-	S	3,000.00		3,0	3,000.00	49	3,000.00
	20		750.00		2	750.00	မာ	750.00
~,	_			•	\$ 33,7	33,750.00 \$		33,750.00
	TOTALS	S	99,827.00	\$ 80,000.00		119,827.00 \$	7,928.00 \$	207,755.00

Pages 1 of 2

(Revised 5/31/2019)

# BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

### OTHER REQUIREMENTS:

All of the columns in the budget table and the matching contribution table MUST be completed appropriately or the application will be invalid. Please see the example budget sheet for additional clarification.

\*Units = feet, hours, inches, etc. Do not use lump sum unless there is no other way to describe the costs.

\*\*Can include in-kind materials. Justification for in-kind labor (e.g. hourly rates used for calculations). Describe here or in text.

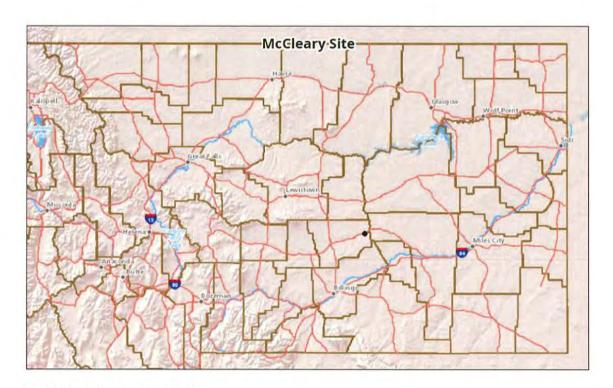
Reminder: Government salaries cannot be used as in-kind match

\*\*\*The Review Panel suggests that design and oversight costs associated with a proposed project not exceed 15% of the total project budget. If design and oversight costs are in excess of 15%, applications must include a minimum of two competitive bids for the cost of undertaking the project.

\*\*\*\*The Review Panel recommends a maximum fencing cost of \$1.50 per foot. Additional costs may be the responsibility of the applicant and/or partners.

## MATCHING CONTRIBUTIONS (do not include requested funds)

CONTRIBUTOR	IN-KIND SERVICE	ų,	IN-KIND CASH	TOTAL	Secured? (Y/N)	
Matt McCleary	\$ 119,827.00 \$	\$ 00.	i	\$ 119,827.00 Y	Y 00.	
MTFWP SWIG already paid for project development.		B	4,928.00	S	4,928.00 Y	
Allied Engineering, Paul Sanford engineer donated time		B	3,000.00	S	3,000.00 Y	
Matt will be contributing time and dollars and believes he can reduce his cost to about 80,000 total. He would have had approximately 60,000 invested in moving the pump site and water supply lines.	ь	69	i	ь		
	69-	69	i	es		
Ratt Team site visit part of Musselshell Water Coaltion effort	69	69	T	w	>	completed
	49	S	¥	ss		
	69	es.	ř	₩	χ.	
	69	69	÷	69		
	49	S		69		
TOTALS \$	\$ 119,827,00 \$	\$ 00.	7,928.00 \$	\$ 127,755.00	00:	



Map 1-Location within Montana.

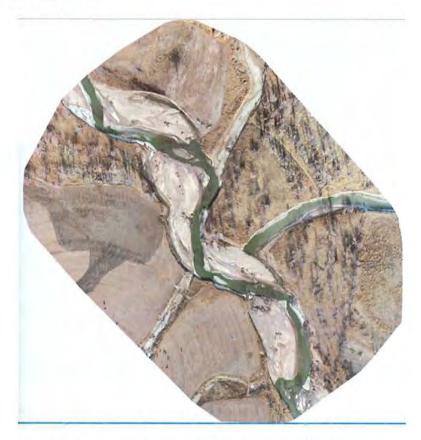
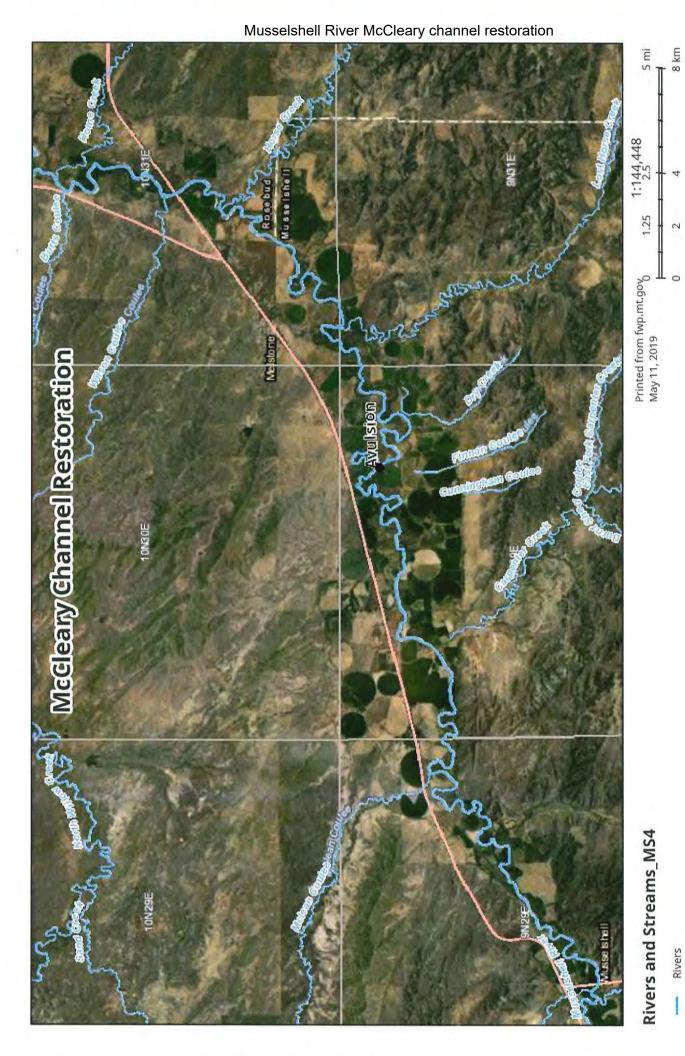


Image 1-Condition of site December 2018, Allied Engineering drone image.



This map was generated from the Montana Fish, Wildlife & Parks (FWP) internal FWP Mapper online mapping system. Data layers on this map may depict sensitive species level information. This map is not intended for distribution or use beyond work associated with FWP.

Large Streams Small Streams



This map was generated from the Montana Fish, Wildlife & Parks (FWP) internal FWP Mapper online mapping system. Data layers on this map may depict sensitive species level information. This map is not intended for distribution or use beyond work associated with FWP.

0.6 mi

1:18,056

0.15

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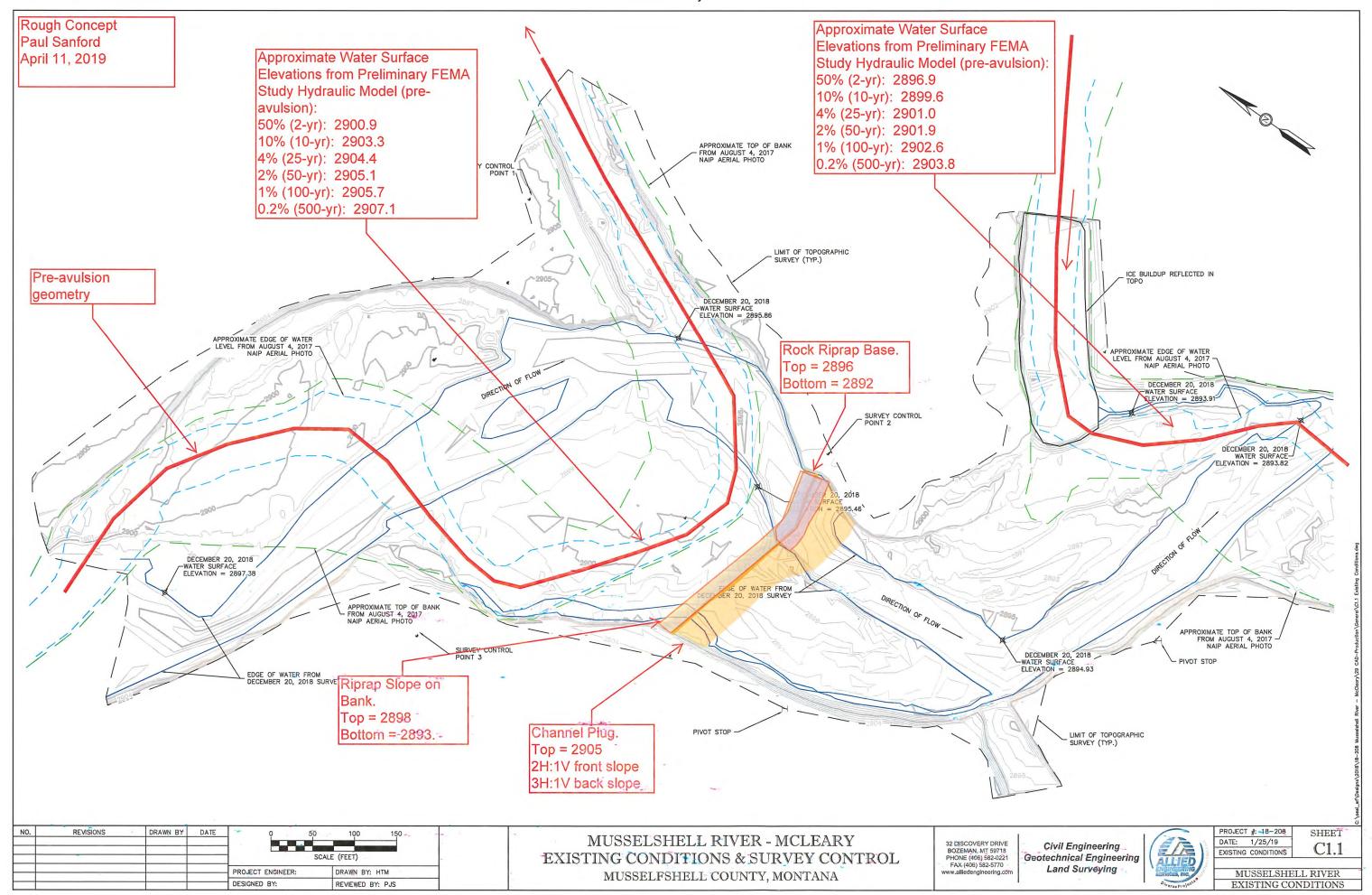
May 31, 2019

0.9 km

0.225

### River Mile Points - 0.10 Mile

River Mile Points - 0.10 Mile





Civil Engineering • Geotechnical Engineering • Land Surveying • Construction Services

ALLIED ENGINEERING

32 Discovery Dr. Bozeman, MT 59718 Ph: (406) 582-0221

May 31, 2019

Montana Fish, Wildlife & Parks
Fisheries Division, Future Fisheries Board
C/O Michelle McGree
1420 E. Sixth Ave.
P.O. Box 200701
Helena, MT 59620-0701

RE: Future Fisheries Grant Request Support Letter
Matt McCleary and MTFWP Channel Restoration

Dear Future Fisheries Grant Review Board:

I write this letter supporting funding for the McCleary Musselshell River Channel Restoration proposal put forward by Matt McCleary, the landowner, and Mike Ruggles with FWP. The proposal aims to re-establish river connectivity to an abandoned channel. This restoration would reduce the slope of the river channel and reduce the rate of erosion downstream. It would provide reconnection to nearly 1.5 miles of river, and provide habitat for sauger, catfish, and other native fish. The additional river length also has the potential to improve water table conditions. The RATT team included meander reactivation as a viable option to restore the river and provide water to an irrigation pump and homesite water supplies.

Allied Engineering surveyed the project site and acquired drone photogrammetry in December 2018. On a pro-bono basis, I worked with Mike Ruggles to develop two rough concepts for plugging the avulsion channel. The first concept involved a channel plug with a height below the 10% annual chance flood event. The plug would be designed to withstand overtopping flow by building a gradually sloped vegetated spillway ramp in the avulsion channel. The estimated cost for this option exceeded available funds.

The second concept involved a channel plug with a height at or above the floodplain elevation and with steeper side slopes. If overtopped, the plug would have an increased risk of erosion/failure compared to the plug in the first option. However, by building the plug to the floodplain elevation, the probability of overtopping is decreased compared to the first option. For example, if the top of the plug was at the level of the 1% annual chance flood event water surface elevation, there would be a 1% chance of overtopping each year. This option would also involve some grading work at the head of the abandoned channel to reestablish flow. Once flow is re-established into the abandoned channel, this option relies upon the river to do any remaining channel shaping work in the reactivated meander. If the work done by the river is not adequate, there could be an increased risk of floodplain overtopping at the plug and/or the location downstream with the narrow meander neck. Also, not using the avulsed channel for flood relief, such as in the first option, could increase the avulsion risk at other sites across the meander.

While the second concept carries some additional risk compared to the first concept, the second concept's cost offers a more feasible opportunity. The decision to move forward with the project ultimately rests with the project stakeholders as they weigh the cost, benefits, and risks. However, I believe the project represents a unique opportunity to regain nearly 1.5 miles of river habitat.

Future Fisheries Grant Request Support Letter Matt McCleary and MTFWP Channel Restoration

May 31, 2019

I believe this would be a good project for the board to approve and join the partnership that has been built with the goal of improving river conditions in the Musselshell River.

Sincerely,

Allied Engineering Services, Inc.

Paul Sanford

2019.05.31 09:21:33

2000-06'00

Paul Sanford, PE Principal Civil Engineer

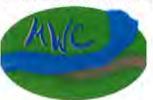
### Musselshell Watershed Coalition

Board members: President Shirley Parrot, Vice-President Bill Bergin, Jr., Diane Ahlgren, Shane Moe, Lynn

Rettig, Leon Hammond, Craig Dalgarno Coordinator: Laura Nowlin

P.O. Box 118 Winnett, MT 59087

http://musselshellwc.wix.com/musselshellwc



May 30, 2019

Montana Fish, Wildlife & Parks
Fisheries Division, Future Fisheries Board
C/O Michelle McGree
1420 E. Sixth Ave.
P.O. Box 200701
Helena, MT 59620-0701

Subject: McCleary Channel Restoration Support

Dear Ms. McGree;

The Musselshell Watershed Coalition (MWC) would like to offer this letter in support of Matt McCleary's application for support of a Musselshell River channel reconnection project.

The MWC serves local residents and works toward collaborative resource management of the Musselshell River Watershed. The Musselshell River Watershed contains approximately 9,500 square miles. The entire area is home to approximately 9,325 people. These people and their management approaches are key to sustaining both the land and the communities within the watershed.

Following flooding in 2018, the MWC reassembled the River Assessment Triage Team (RAT Team). This team of river professionals, including geomorphologists and fisheries experts, met with landowners to discuss changes caused in 2018 and possible restoration and recovery efforts. Mr. McCleary requested a visit from the RAT Team and they met with him in the fall of 2018.

This project will restore 1.5 miles of river, reducing the steep slope, providing more aquatic habitat, and providing a pilot project for channel reconnection on the Musselshell River. This project will be an example for others who are considering channel reconnection to look for results. The MWC supports this project for its benefits to river health and to the landowner.

Thank you for your time and consideration.

Zawra Nowlin

Laura Nowlin MWC, Coordinator

### Lower Musselshell Conservation District

Po Box 160 Roundup, MT 59072 Phone (406)323-2103 x101

Email: Wendy. Jones@MT. nacdnet.net



### Future Fisheries Grant Request Support Letter

May 29, 2019

For: Matt McCleary and MTFWP Channel Restoration

Dear Future Fisheries Grant Review Board,

I am writing this letter to support the funding for the McCleary Musselshell River Channel Restoration proposal put forward by Matt McCleary the landowner and Mike Ruggles with FWP. This project is to re-establish connectivity to an abandoned river channel and it is a rare opportunity to do so as many landowners do not see the need to reestablish these channels. This project will not only reduce the slope of the river channel but will also reduce the rate of erosion downstream. Another benefit of this project is the reconnections of nearly 1.5 miles of river habitat for species such as sauger, catfish, and many other native fish species. The RATT team included this as a viable option to restore the river and provide to an irrigation pump and homesite water supplies. This project has the potential to improve water table conditions as the river would have more length.

The Lower Musselshell Conservation District supports this project as it includes plans to improve the condition of the river, increases river habitat, and is supported by the landowner and the FWP. We have worked with Mike Ruggles for many years and his knowledge of the Musselshell River is extensive. We have always appreciated and respected his advice on our 310 Permit inspections. Therefore, we fully support this project to re-establish the abandoned river channel and all the benefits it will being to the river.

I believe that this would be an excellent project for the board to approve and join the partnership that has been built with the goal of improving river conditions in the Musselshell River.

Sincerely,

Wendy Jones
Lower Musselshell Conservation District
District Administrator
(406)-323-2103 X101
Wendy Jones@MT.nacdnet.net



P. O. Box 201

Harlowton, Montana 59036

Ph. (406) 632-5534 x101

Mike Ruggles
Dept of Fish Wildlife and Parks
2300 Lake Elmo Drive
Billings, MT 59105

Dear Mike,

The supervisors of the Upper Musselshell Conservation District reviewed the Matt McCleary project and would like to offer their support.

The Musselshell River has been seriously impaired by the many man-made channel changes, including channel straightening, shortening, realignments, dikes and diversion. In the past 9 years we have been hit by a series of floods that has added a dramatic impact on the river system. The loss of river miles due to the 2011 is well documented. Matt McCleary's project to reclaim the meander will help stabilize the area and establish some length that would benefit both aquatic resources and re-establish the river connection to the producer's water source.

Thank you,

Bill Clements, Chairman

**Upper Musselshell Conservation District** 

### YELLOWSTONE CONSERVATION DISTRICT

1371 RIMTOP DRIVE, BILLINGS, MT 59105

PHONE: 406.247.4420; FAX: 406.247.4416

Montana Fish, Wildlife & Parks
Fisheries Division, Future Fisheries Board
C/O Michelle McGree
1420 E. Sixth Ave.
P.O. Box 200701
Helena, MT 59620-0701

### RE: Future Fisheries Grant Application Letter of Support for Matt McCleary and MTFWP Channel Restoration Proposal

Dear Future Fisheries Grant Review Board:

The Yellowstone Conservation District writes this letter supporting funding for the McCleary Musselshell River Channel Restoration proposal put forward by Matt McCleary landowner and Mike Ruggles with FWP.

The project location is not in Yellowstone County but the YCD Board of Supervisors finds the project very worthwhile for the Musselshell River and eastern Montana for several reasons, a few of which are listed below:

- Very few warm water fisheries projects are applied for and funded by the Future Fisheries Board in Eastern Montana and this is an opportunity to fund a good project;
- Very commendable and rare for a landowner to re-establish connectivity to an abandoned channel;
- This restoration would reduce the slope of the river channel and reduce the rate of erosion downstream. It would provide reconnection to nearly 1.5 miles of river habitat. The RATT team included this as a viable option to restore the river and provide water to an irrigation pump and homesite water supplies. This project has potential to improve water table conditions as the river would have more length. It would provide habitat for sauger, catfish, and other native fish.

Please give serious consideration to fully fund this very worthwhile Future Fisheries grant application.

Cordially,

Chad Sedgwick
Chair, Yellowstone Conservation District Board of Supervisors

### Ruggles, Mike

From:

Mike Penfold <penrodmt@gmail.com>

Sent:

Thursday, May 23, 2019 7:43 AM

To:

musselshellwc@gmail.com; Wendy.Jones@mt.nacdnet.net; DNRC Upper Musselshell CD;

Dana Lariviere; Ruggles, Mike

Subject:

Musselshell Project - McCleary Channel

Mike Ruggles, MFWP

Dear Mike, We reviewed the project and it looks good. The steepening of the Musselshell River channel will not be good for riparian zones, fisheries and will cause additional problems for landowners along the river. Our Montana supports the project. We also encourage long term monitoring of the effectiveness of the project.

Mike Penfold, Fiield Program Director, Our Montana

### Montana Catfish Association

P.O. Box 1188 • Glasgow, MT 59230

Phone: (406) 939-0209 • bradyflaten@montanacats.com • www.montanacats.com

### **Future Fisheries Grant Request Support Letter**

5/30/19

C/O Michelle McGree 1420 E. Sixth Ave. P.O. Box 200701 Helena, MT 59620-0701

FOR: Matt McCleary and MTFWP Channel Restoration

Dear Future Fisheries Grant Review Board,

I write this letter, at the request of the Montana Catfish Association board of directors, supporting funding for the McCleary Musselshell River Channel Restoration proposal put forward by the Matt McCleary landowner and Mike Ruggles with FWP. Our organization believes that projects like these are exactly what the legislature envisioned on assisting in 1995, when the Montana legislature passed the Future Fisheries Improvement Program. This public/private partnership is a PRIME example of MTFWP working with local land owners on restoring, enhancing and protecting habitat of our native fisheries, as well as benefit local economies.

The River Assessment Triage Team included the following proposal as a completely viable option in their 2018 site report. The opportunity to lengthen the Musselshell River channel (which has undergone extreme changes due to 2011 flood) and slow the river is a goal we should all strive for. We feel by helping alleviate this problem earlier, can hedge off more costly solutions down the line. Reconnecting this 1.5 miles of river, will help reestablish a critical riffle, hole, run series which provides critical spawning habitat for numerous native fish, as well as forage populations. With over 37 miles lost to this critical spawning habitat during the 2011 flood, our organization feels it's important to get out in front of this possible future environmental tragedy. We feel this is a small but critical step that could provide an example for future projects. As stated in the RATT "a project like this will provide a good demonstration project for actively reducing the slope in areas of channel straightening while recovering a good, stable point of diversion".

As an angler and sportsmen, I (and dozens of our members) spend multiple days on the Musselshell River annually. Trust me when I say, this body of water is a hidden gem. Many don't know, but the Musselshell is one of the premier Channel Catfish fisheries in the entire country. The opportunity for native fish to make the annual migration for prime spawning habitat is unique to this body of water in our State. The number of native species (not just Channel Catfish) that utilize the Musselshell is astounding. Please take the time to strongly consider this project. I believe this would be great for the board to approve and join the partnership that has been built with the goal of improving river conditions in the Musselshell River.

Sincerely,

Brady Flaten

Montana Catfish Association-President